

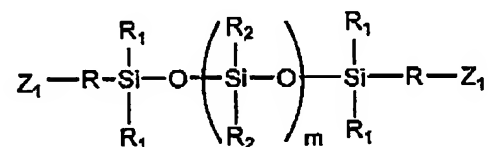
Serial No. 10/765,401

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application

LISTING OF CLAIMS

Claim 1 (withdrawn): A prepolymer precursor comprising:



wherein the R groups may be the same or different saturated C₁₋₁₀ hydrocarbon substituents; the R₁ groups may be the same or different C₁₋₁₀ alkyl substituents; the R₂ groups may be the same or different selected from the group consisting of C₁₋₁₀ alkyl substituents, C₁₋₁₀ fluoroalkyl substituents, C₂₋₂₀ alkyl-fluoroalkyl substituents and C₆₋₃₀ aromatic substituents; m is a natural number greater than 4 representing the sum of siloxane moieties with randomly differing R₂ groups as defined above so as to have a molar ratio of aromatic substituents to alkyl substituents no less than 1:4 such that the prepolymer molecular weight is at least approximately 1000 and refractive index is at least approximately 1.45; and the Z₁ groups may be the same or different selected from the group consisting of -OH and -NH₂.

Claim 2 (withdrawn): The prepolymer precursor of claim 1 wherein at least one of said Z₁ groups is -OH.

Claim 3 (withdrawn): The prepolymer precursor of claim 1 wherein at least one of said Z₁ groups is -NH₂.

Claim 4 (withdrawn): The prepolymer precursor of claim 1 wherein each R₁ group is methyl and each R₂ group is phenyl.

Claim 5 (withdrawn): The prepolymer precursor of claim 1 wherein each R group is trimethylene or tetramethylene.

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Claim 6 (withdrawn): The prepolymer precursor of claim 1 wherein each R₂ group is the same selected from the group consisting of phenyl, naphthyl and methyl.

Claim 7 (withdrawn): The prepolymer precursor of claim 1 wherein one R₂ group is phenyl and the other R₂ group is methyl.

Claim 8 (withdrawn): A method of producing the prepolymer precursors of claim 1 comprising:

reacting 1,3-bis-hydroxyalkyl polysiloxane or 1,3-bis-aminoalkyl polysiloxane with at least one silane selected from the group consisting of dimethyldimethoxysilane, diphenyldimethoxysilane and methylphenyldimethoxysilane.

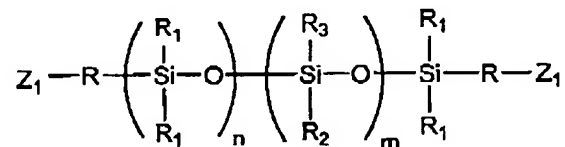
Claim 9 (withdrawn): A method of producing the prepolymer precursors of claim 1 comprising:

reacting 1,3-bis-hydroxyalkyl polysiloxane or 1,3-bis-aminoalkyl polysiloxane with at least one cyclic polysiloxane selected from the group consisting of 1,3,5-trimethyl-1,3,5-triphenylcyclotrisiloxane, 1,1,3,3,5,5-hexamethylcyclotrisiloxane and 1,1,3,3,5,5-hexaphenylcyclotrisiloxane.

Claim 10 (withdrawn): The method of claim 8 or 9 wherein said 1,3-bis-hydroxyalkyl polysiloxane is 1,3-bis-hydroxybutyltetramethyldisiloxane.

Claim 11 (withdrawn): The method of claim 8 or 9 wherein said 1,3-bis-aminoalkyl polysiloxane is 1,3-bis-aminopropyltetramethyldisiloxane.

Claim 12 (currently amended): A polymeric composition produced through the copolymerization of one or more prepolymers produced from one or more prepolymer precursors having a formula of



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wherein the R groups may be the same or different saturated C₁₋₁₀ hydrocarbon substituents; the R₁ groups may be the same or different C₁₋₁₀ alkyl substituents; the R₂ groups may be the same or different and are selected from the group consisting of C₁₋₁₀ alkyl substituents, C₁₋₁₀ fluoroalkyl substituents, and C₂₋₂₀ alkyl-fluoroalkyl substituents; the R₃ groups may be the same or different C₆₋₃₀ aromatic substituents; n is a natural number; and m is a natural number greater than 4 representing the sum of siloxane moieties with randomly differing R₁, R₂ and R₃ groups as defined above so as to have a molar ratio of aromatic substituents to alkyl substituents no less than 1:4 such that the prepolymer molecular weight is at least approximately 1000 and refractive index is at least approximately 1.45; and the Z_i groups may be the same or different and are selected from the group consisting of -OH and -NH₂, with one or more aromatic monomers, alkyl monomers, hydrophilic monomers or a combination thereof.

Claim 13 (original): The polymeric composition of claim 12 wherein said one or more aromatic monomers are selected from the group consisting of acrylate, methacrylate, acrylamide and methacrylamide, each with aromatic substituents.

Claim 14 (original): The polymeric composition of claim 12 wherein said one or more aromatic monomers are selected from the group consisting of phenyl acrylate, phenyl(meth)acrylate, phenyl acrylamide, benzyl acrylate, benzyl acrylamide, phenylethylacrylate, phenyl(meth)acrylamide, phenylethyl(meth)acrylate and benzyl(meth)acrylate.

Claim 15 (original): The polymeric composition of claim 12 wherein said one or more alkyl monomers are selected from the group consisting of C₁₋₂₀ alkyl acrylate, C₁₋₂₀ alkyl methacrylate, C₆₋₂₀ acrylamide and C₆₋₂₀ methacrylamide.

Claim 16 (original): The polymeric composition of claim 12 wherein said one or more alkyl monomers are selected from the group consisting of methyl acrylate, ethyl acrylate, n-propyl acrylate, n-butyl acrylate, n-hexyl acrylate, n-octyl acrylate, 2-ethylhexyl acrylate, n-propyl methacrylate, n-butyl methacrylate, n-hexyl methacrylate, n-octyl methacrylate, 2-ethylhexyl methacrylate and n-octyl acrylamide.

Claim 17 (original): The polymeric composition of claim 12 wherein said one or more hydrophilic monomers are selected from the group consisting of N,N-dimethyl acrylamide, N-

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vinylpyrrolidone, 2-hydroxyethyl methacrylate (HEMA), glycerol methacrylate, 2-hydroxyethyl acrylate, acrylamide, n-methyl acrylamide, acrylic acid and (meth)acrylic acid.

Claim 18 (currently amended): A method of producing the polymeric composition of claim 12 useful in the manufacture of ophthalmic devices comprising:

reacting one or more aromatic monomers, alkyl monomers or hydrophilic monomers with one or more polysiloxane prepolymers with one or more aromatic monomers, an alkyl monomers or hydrophilic monomers produced from one or more prepolymer precursors having the formula recited in claim 12.

Claim 19 (original): The method of claim 18 wherein said one or more aromatic monomers are selected from the group consisting of acrylate, methacrylate, acrylamide and methacrylamide, each with aromatic substituents.

Claim 20 (original): The method of claim 18 wherein said one or more aromatic monomers are selected from the group consisting of phenyl acrylate, phenyl(meth)acrylate, phenyl acrylamide, benzyl acrylate, benzyl acrylamide, phenylethylacrylate, phenyl(meth)acrylamide, phenylethyl(meth)acrylate and benzyl(meth)acrylate.

Claim 21 (original): The method of claim 18 wherein said one or more alkyl monomers are selected from the group consisting of C₁₋₂₀ alkyl acrylate, C₁₋₂₀ alkyl methacrylate, C₅₋₂₀ acrylamide and C₅₋₂₀ methacrylamide.

Claim 22 (original): The method of claim 18 wherein said one or more alkyl monomers are selected from the group consisting of methyl acrylate, ethyl acrylate, n-propyl acrylate, n-butyl acrylate, n-hexyl acrylate, n-octyl acrylate, 2-ethylhexyl acrylate, n-propyl methacrylate, n-butyl methacrylate, n-hexyl methacrylate, n-octyl methacrylate, 2-ethylhexyl methacrylate and n-octyl acrylamide.

Claim 23 (original): The method of claim 18 wherein said one or more hydrophilic monomers are selected from the group consisting of N,N-dimethyl acrylamide, N-vinylpyrrolidone, 2-hydroxyethyl methacrylate (HEMA), glycerol methacrylate, 2-hydroxyethyl acrylate, acrylamide, n-methyl acrylamide, acrylic acid and (meth)acrylic acid.

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Claim 24 (withdrawn): A method of producing an ophthalmic device using the polymeric composition produced through the method of claim 18 comprising:

casting said polymeric composition in the form of a rod;

lathing or machining said rod into disks; and

lathing or machining said disks into an ophthalmic device.

Claim 25 (withdrawn): A method of using the ophthalmic device produced through the method of claim 24 comprising:

making an incision in the cornea of an eye; and

implanting said ophthalmic device.

Claim 26 (withdrawn): A method of producing an ophthalmic device using a polymeric composition produced from one or more of the prepolymer precursors of claim 1 comprising:

pouring said polymeric composition prior to curing into a mold;

curing said polymeric composition; and

removing said polymeric composition from said mold following curing thereof.

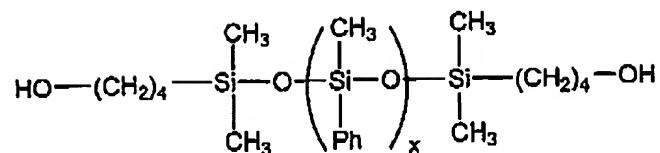
Claim 27 (withdrawn): A method of using the ophthalmic device produced through the method of claim 24 or 26 comprising:

making an incision in the cornea of an eye; and

implanting said ophthalmic device.

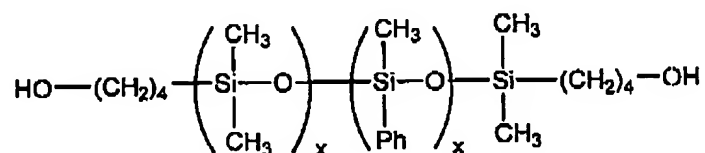
Claim 28 (withdrawn): A prepolymer precursor comprising:

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wherein the Ph groups are the same or different C₆₋₃₀ aromatic substituents and x is a natural number such that the prepolymer molecular weight is at least approximately 1000 and refractive index is at least approximately 1.45.

Claim 29 (withdrawn): A prepolymer precursor comprising:



wherein the Ph groups are the same or different C₆₋₃₀ aromatic substituents and x is a natural number such that the prepolymer molecular weight is at least approximately 1000 and refractive index is at least approximately 1.45.